

# Nearby Universe Discussion

Warm Spitzer Workshop  
June 4, 2007

## Goals

- Identify interesting science cases that will justify an extended Spitzer mission
  - Projects should exploit the unique aspects of Warm Spitzer: large amounts of telescope time, stable PSF, low background, multi-year observations
  - Large projects should be considered in light of improving the legacy value of Spitzer
    - Surveys with uniform depth
    - Time variability

## Potentially Interesting Parameter Space

- **Breadth**
  - Morphological type
  - Environment
- **Depth**
  - Edge of disks
  - Tidal debris
- **Time**
  - Variability studies

## Not to be missed...

- **Outer disks**
  - Tidal debris
  - Where does disk end?
  - Satellite systems
  - Environmental effects
- **Variability**
  - SN, AGB stars, YSOs
- **Environment and Galaxy Evolution**
  - Groups/Clusters as function of  $z$
  - Galaxy mergers
- **Galaxy Morphology**
  - Stellar distribution
- **AGNs**
  - Hot dust

## Observing Modes

- Targeted observations
  - Local Group Galaxies (variability)
  - Edge of Disks (deep)
  - AGN survey
  - Morphology survey
  - Environmental survey (group/clusters)
    - e.g., Virgo Cluster, Sculptor Group
- Required supporting data
  - AGN survey needs X-ray obs
  - Galaxy Groups need X-ray obs

## SSC Support

- Data products
  - Mosaicked images (pipeline)
- PI or Community driven?
  - Sample selection will be key to success for most of these projects
  - Zero or extremely short proprietary period recommended for data associated with “huge” projects to encourage/enable community access

## New Ideas

- Groups
- Survey of known AGNs